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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY-DOCKET NO.	CONFIRMATION NO.
09/924,307	08/06/2001	Juan Montojo	PA010180	3075
23696	7590	05/17/2005	EXAMINER EMDADI, KAMRAN	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			ART UNIT 2667	PAPER NUMBER

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/924,307

Applicant(s)

MONTOJO ET AL.

Examiner

Kamran Emdadi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-82 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-28, 31-45, 48-69 and 72-82 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 29, 30, 46, 47, 70 and 71 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-3, 7, 11, 13-14, 16-21, 23, 25-27, 31, 35, 38, 40, 42-44, 48, 52, 54-55, 57-62, 64, 66-68, 72, 76, 79 and 81, are rejected under 35 U.S.C. 102(e) as being anticipated by Sarkar et al. (U.S. Patent No. 6,842,624).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

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Regarding claims 1, 25, 42 and 66, Sarkar teaches a power control system for a wireless communications system. The power control system includes a power control unit configured to determine a power ratio between a first and second channel (see column 2, lines 14-23). The power is controlled as a function of a parameter of the first channel, and the first and second channel are used to determine a power ratio between the first and second channels (see column 12, line 60 – column 13, line 5).

Regarding claims 2, 26, 43 and 67, Sarkar teaches CDMA (see column 1, line 29).

Regarding claims 3, 27, 44 and 68, Sarkar teaches TDMA (see column 1, line 27).

Regarding claims 7, 23, 31, 40, 48, 64, 72 and 81, Sarkar teaches a ratio between the channels (see column 2, lines 14-23).

Regarding claims 11, 35, 52 and 76, in addition to the above described features, Sarkar teaches a first and second time period during which the power control measurements are made (see column 2, lines 16-17 and lines 26-30).

Regarding claims 13, 19 and 54, Sarkar teaches a receiver 204 coupled to a processor 218 (see figure 2), where the signal is processed.

Regarding claims 14, 21, 38, 55, 62 and 79, Sarkar teaches compensating the first and second channel signals based on the level of the power ratio between the first and second channels (see column 10, lines 33-38)

Regarding claims 16 and 57, Sarkar teaches a receiver 204 that downconverts to baseband (see column 5, line 67 – column 6, line 1).

Regarding claims 17 and 58-60, Sarkar teaches a power command generator 308 that generates a signal 314a (see column 7, lines 45-48).

Regarding claims 18, 20 and 61, Sarkar teaches the power command generator 226 is coupled to a processor 218 (see figure 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 8-10, 12, 15, 22, 24, 28, 32-34, 36-37, 39, 41, 45, 49-51, 53, 56, 63, 65, 69, 73-75, 77-78, 80 and 82, are rejected under 35 U.S.C. 103(a) as being obvious over Sarkar in view of Pfeil et al. (U.S. Patent No. 6,191,738).

The applied reference "Sarkar" has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application

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and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Sarkar teaches all of the above disclosed features except for computing an unnormalized cross-correlated value between an actual waveform and an ideal waveform, a logarithmic ratio, $\Delta = 10\log_{10}$ power computations, and a first and second time period for performing the cross correlation. Pfeil teaches a wireless communications system with a cross correlation feature that correlates a received signal (actual) with a re-modulated signal (ideal) (see column 5, lines 10-17). The correlation is done during a time period designated for each signal (see column 5, lines 20-25). The $10\log_{10}$ power computation is used to solve Δ (see column 8, line 49). A ratio is used in solving the correlation computations (see column 5, line 39). Lastly, phase, frequency and time units are used in the correlation computations (see column 7, lines 30-35 and column 6, lines 10-11).

Motivation to combine these two references is evident from the discussions presented in the background portions of the respective specifications. For instance, Sarkar discloses the need to provide a wireless communications system with a dynamic transmission power mechanism without degradation of signal quality (see column 2, lines 40-47). Similarly, Pfeil discloses a method for calculating timing information in a wireless communications system that seeks to locate a remote terminal with relatively

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high accuracy to avoid delayed signal transmissions (see column 2, lines 5-12).

Therefore, it would have been obvious at the time the invention was made to have combined the teachings of these two references to increase reliability in wireless communications systems and arrive at the disclosed features recited in claims: 4, 8-10, 12, 15, 22, 24, 28, 32-34, 36-37, 39, 41, 45, 49-51, 53, 56, 63, 65, 69, 73-75, 77-78, 80 and 82.

Allowable Subject Matter

Claims 5-6, 29-30, 46-47 and 70-71 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: None of the prior art references discussed, taken individually or in combination, teach the computation of unnormalized cross-correlated values using the equation(s) disclosed in these claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kamran Emdadi whose telephone number is 571-272-6047. The examiner can normally be reached M-F between the hours of 8am and 5pm.

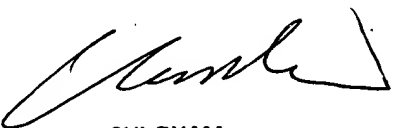
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kamran Emdadi

May 12, 2005


CHI PHAM
SUPERVISORY PATENT EXAMINE
TECHNOLOGY CENTER 2667 5/16/05